

Topic Summaries

Discussion

CHAIRMAN PERKINS: We have a few minutes for some questions or comments from the audience.

MR. SAWADA (*Japan Society for the Promotion of Science*): Thank you very much for allowing me to make a brief comment. My name is Sawada and I'm the Chairman of Japan Society for the Promotion of Science. Dr. Coombs and Dr. Perkins both expressed a view concerning the joint research and cooperation between the university and industrial sectors with which I am in agreement. In particular, I would stress that the mission of the university is to develop human resources as well as to promote scientific and academic studies. Indeed, the development of human resources and the promotion of academic knowledge need also to be at the heart of the cooperation between the university and industry.

Also, the issue of a code of ethics, which was mentioned by Dr. Kerr and Dr. Cleveland, was very informative to the Japanese members of the audience. A similar code is needed in Japan.

Cooperation between industry and the university to conduct joint research is a basic educational attitude in Japan. Under the Minister of Education, we now have a scientific council that have set objectives for this joint research effort.

CHAIRMAN PERKINS: Thank you, Mr. Sawada. Are there another questions?

DR. KIDA (*Dokkyo University*): I would like to make some comments as regards the relationship between society, the university and industry. When we look at the history of universities, I believe that the university has been the tertiary industry to answer the needs of society. In the past, we first had agriculture which was the primary industry followed by manufacturing which

was the secondary industry. However, after the last world war, society has been moving in the direction of a tertiary, service industry which is dependent upon intellectual activity. In today's intellectual society, the question arises as to the proper role to be played by the universities.

It should be noted that this role is not the same as that played by higher education in the last century. In the area of research, universities are now also involved in several fields of applied research. This research has become very critical to society as a whole. Universities, however, still have the important function of education.

In Japan today, there are 2,500,000 university students -- fifty years ago that as the number of students in middle level education. This illustrates the fact that today, the universities play a far broader role in the education of society, assuming many of the responsibilities of secondary schools. In other words, the university of today must provide a very wide range of services just as the secondary schools did fifty years ago. And we have to reconsider present day society from that perspective, especially in terms of what research, education and universities can provide in the future.

Thank you, very much.

DR. CLEVELAND: I would like to agree very thoroughly with Dr. Kida's point. The information society which has a much higher content of service activity at the cost of agriculture and manufacturing, will have important implications for the university. I think that the service function of the university has to be brought up to a point of emphasis and prestige that is comparable to the research and teaching that has always been at the center of academia. In the traditional university importance was attached to teaching and research and service was considered a second class activity which did not count as much towards promotion and tenure.

Today, education beyond the walls of the school itself becomes just as important as education in the classroom. This fact has not yet entered into the internal procedures of most universities, but I think that will be one of the important implications for universities in the information society.

CHAIRMAN PERKINS: I am sorry, but we have run out of time for this

particular session. I thank Mr. Sawada and Dr. Kida for their comments.